For Corrosion Protection on existing tanks, Add CP, Line Tank, or Both

Cathodic Protection (CP)

TO BE IN COMPLIANCE, ALL APPLICABLE REQUIREMENTS MUST BE MET.

The following are requirements for <u>all</u> CP systems.

1. **CATHODIC PROTECTION INSTALLATION AND TESTING.**

If you are considering installation of cathodic protection on steel tanks, contact Tennessee Oil Marketers Association, Tennessee Petroleum Equipment Contractors Association, Tennessee Gasoline Dealers and Auto Repair Association or Tennessee Petroleum Council for information about companies doing business in this area. You can contact NACE International (formerly the National Association of Corrosion Engineers), Box 218340, Houston, TX 77218-8340, phone (713-492-0535 for updated lists.

TN UST continues to streamline its operations and make the system more user-friendly. Following confusion over credentials required for performing cathodic protection (CP) system testing, in Tennessee, the Division decided to merely require that anyone doing CP system testing on petroleum underground storage tanks in Tennessee to use the State's form. Final revisions are being made on it and it should be available by early summer 1998. If you are in the business of testing CPs, you should be aware of this change and be prepared to use the form as soon as it is available.

2. **INITIAL TESTING CONDUCTED WITHIN 6 MONTHS OF INSTALLATION.**

In most instances, testing should be conducted immediately upon installation of CP. Six months is allowed because there are circumstances such as very dry soils where it may take some time for CP to become fully effective.

3. **TESTING CONDUCTED WITHIN 6 MONTHS OF ANY STORAGE SYSTEM REPAIRS.**

Construction or repair activities may accidentally interfere with CP systems. It is important to be sure CP system is working after any work is completed that disturbs any portion of the storage tank system.

4. **RECORDS ON FILE OF LAST TWO TEST RESULTS.**

CP systems must be tested within six months of installation and every three years thereafter for galvanic or sacrificial anode systems. Records may be kept at a central office rather than the facility itself.

The following are additional requirements for impressed current CP systems only:

1. **SYSTEM VOLTAGE AND AMPERAGE READINGS RECORDED EVERY 60 DAYS.**

Impressed current systems tap into facility's electrical supply to provide CP. Amount of electricity use must be monitored to ensure that system is working properly. With a few minutes' instruction from person who designed system, facility manager should be able to do monitoring.

2. **RECORDS ON FILE OF LAST THREE VOLTAGE AND AMPERAGE READINGS FROM THE RECTIFIER.**

Records may be kept at central office rather than facility itself.

3. **CP SYSTEM DESIGNED BY CORROSION EXPERT.**

Impressed current systems are tricky and can damage the storage tank system rather than protect it if they are not properly designed. They must be designed by a person who is a corrosion expert. Tennessee recognizes individuals who have NACE certifications as "Corrosion Specialist" or "CP Specialist" as corrosion experts.

Interior Tank Lining

TO BE IN COMPLIANCE, ALL APPLICABLE REQUIREMENTS MUST BE MET.

The following are requirements for all interior tank lining.

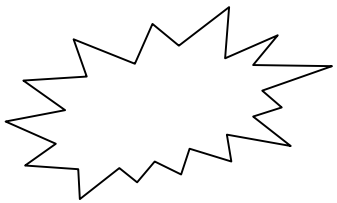
1. **LINING INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.**

Included is inspection to confirm tank is structurally sound, lining is compatible with product stored and tightness tested before it is brought back into service.

Industry standards govern tank lining installation practices.

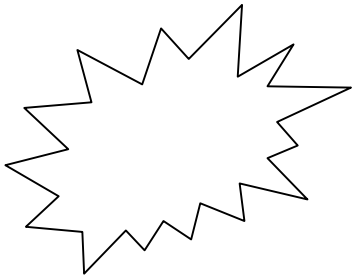
2. APPROPRIATE INSPECTIONS MADE AND RECORDS KEPT.

Ten years after lining and every five years thereafter, tanks must be internally inspected and found to be structurally sound. (The only exception to this inspection requirement is if CP is added to a previously lined tank. Inspections are waived only if certain conditions are met.) If structural integrity of tank is compromised, tank must be tightness tested before being brought back into service. Internal inspection results must be retained until the next internal inspection is done.



Visit TN UST on the Internet at

www.tdec.net/ust



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TN UST PROGRAM INFORMATION

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